

REMARKS

Claims 1-29, 32 and 37 are pending. Reconsideration and allowance are respectfully requested.

Claim Rejections 35 USC § 103

Claims 1-4, 11-17, and 20-23, 29, and 37 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima et al. (2003/0032484) ("Ohshima") in view of Ritchey (5,310,794), Lyons (6,181,343) and Sauer (2002/0140708). This rejection is respectfully traversed and reconsideration is requested.

Claim 1 is directed to an interactive environment that is partially real and partially simulated. It includes a structure, a display associated with the structure, and a real, three-dimensional object positioned within the structure. All three cooperate to form a seamless and integrated scene that is directly viewable by an individual. The images in the display form only a part of this scene and do not include the real object.

The Examiner recognizes that Ohshima does not disclose updating the sequence of images and a structure that is large enough to accommodate an individual. Office Action at p. 5. Ohshima also fails to disclose a display fixedly positioned within the scene, a further requirement of claim 1. (Ohshima uses a heads up display which moves with the user. *See, e.g.*, ¶s [0100] – [0105].)

The Examiner nevertheless urges that it would have been obvious to have replaced the heads up display in Ohshima with the wall display of Ritchey because it would have "provide[d] realism." Office Action at p. 7. Applicant respectfully disagrees and requests reconsideration.

The primary object of Ohshima is to control the interaction of a virtual object with a real object. *See* ¶ [0007]. As an example, Ohshima describes a virtual bullet (30) that may be seen hitting a cubic real object (31) in the heads up display. *See* ¶ [0096] and Fig. 1. If the wall display of Ritchey is substituted for the heads up display of Ohshima, however, this visual effect would not work. The user would no longer be able to see the virtual bullet hitting the real cubic object.

Such a substitution would also have caused the real image to have appeared in the wrong place. Both the real and virtual objects appear in Ohshima's the heads up display. *See, e.g.,* ¶ [0105]. If this consolidated imagery was instead displayed on a wall, the real image would appear in the wrong place. This again would have seriously detracted from the realism of the scene.

There also does not appear to be a suggestion anywhere in Ohshima to use a wall display instead of a heads up display. Yet, wall displays were well known at the time. Ohshima et al. did not mention wall displays as an alternative, not because they were beyond their imagination, but because they would have defeated the primary object of Ohshima and created a highly unrealistic effect. In short, the wall display of Ritchey was not be suitable for Ohshima and thus did not constitute an obvious substitution.

The invention of claim 1 has also received significant public recognition. Attached as Exhibit 1 is a transcript of a CNN broadcast that touted the invention on December 6, 2004. Attached as Exhibit 2 is an Associated Press release that similarly paid tribute to the invention. Articles paying tribute to the invention constitute further evidence of non-obviousness. *See, e.g., Emerson Electric Co. v. Spartan Tool, LLC*, 223 F. Supp.2d 856, 915-16 (N.D. Ohio 2002), *Turbocare Division of Demag Delaval Turbomachinery Corp. v. General Electric Co.*, 214 F. Supp.2d 170, 182 (D. Mass. 2002); *Vulcan Engineering Co., Inc. v. Fata Aluminium, Inc.*, 278 F.3d 1366, 1373 (Fed. Cir. 2002); *Warner-Jenkinson Co. v. Allied Chem. Corp.*, 477 F. Supp. 371, 393, 206 USPQ 837, 855 (S.D. N.Y. 1979), *aff'd*, 633 F.2d 208 (2d Cir. 1980); *Jenn-Air Corp. v. Modern Maid Co.*, 499 F. Supp. 320, 209 USPQ 295 (D. Del. 1980), *aff'd*, 659 F.2d 1068 (3d Cir. 1981).

Claims 2-4, 11-17, and 20-23, and 29 are dependent upon claim 1 and thus are also patentable in view of Ohshima, Ritchey, Lyons and Sauer for the reasons stated above.

Claim 2 also requires the display to be configured and positioned so as to appear to the individual to be an integrated and seamless part of the scene that is something other than a display (e.g., a window integrated into a real structure). The fact that the displays in Ritchey may surround the viewer and present a continuous scene, as noted by the Examiner, does not mean that they appear to the viewer to be something other than displays, as required by claim 2. "To

establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations.” M.P.E.P. 2142. This requirement is therefore not met in connection with claim 2. Claims 3 and 4 are dependent upon claim 2 and thus are also patentable for this reason.

Claim 13 also requires the images that are displayed to be captured from a real environment and to be delivered by the processing system to the display in real time. By virtue of the last limitation in claim 1, the environment that is being displayed in real time must also change in response to interaction with the user.

Ritchey displays a real environment. However, nowhere does Ritchey do so in real time, as required by claim 13. To the contrary, Ritchey discloses that this imagery is recorded for later playback on its display.

Lyons only displays the user in the scene. Col. 13, lines 6-19. However, claim 1 requires each image in the display to appear to the individual in the scene to be a real, integral and seamless part of the scene. Plainly, the individual would not regard an image of himself to be a real, integral and seamless part of the scene. Lyons also discloses that this image is displayed on a television, not the display upon which the examiner relies for claim 1. *Id* at line 19. Again, “to establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations.” M.P.E.P. 2142. This requirement is therefore not met in connection with claim 13.

Claim 14 also requires the structure, display and real object to be configured in the form of modules that releasably connect to and disconnect from one another to facilitate the assembly, disassembly, shipment and re-assembly of the interactive environment in various different configurations from the modules. Applicant respectfully disagrees that these features are disclosed in Ritchey. To the contrary, the framework and supports in Ritchey are stated to be held together by “convention fasteners.” Col. 28, lines 26-29. Also, there is no suggestion in Ritchey that its components may be disassembled and reassembled in “various different configurations,” as also required by this claim. Again, “to establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations.” M.P.E.P. 2142. This requirement is therefore not met in connection with claim 14.

Claim 20 also requires the structure, display and real object to cooperate to create the environment of a land, sea or air vessel. An example of claim 20 (combined with the requirements of claim 1 on which claim 20 depends) is a structure that looks like the interior of a ship that contains a real table and a display configured to look like a portal. When the user gets up from the table and walks to the portal, the image that is displayed in the portal changes to realistically reflect what the change in view that would occur in a real ship.

Ritchey does not vary what is displayed in response to the individual taking a plurality of displacement steps, as required by claim 1 (on which claim 20 depends). Instead, this embodiment of Ritchey is only concerned with the vehicle controls that the user manipulates. Thus, there is no reason to modify Ritchey to track the user as he travels, as this would be irrelevant to Ritchey's vehicle control system. Such a modification to Ritchey could only be the result of impermissible hindsight.

Claim 22 also requires the processing system to control a generator, other than a display, of matter or energy that is detectable by one or more human senses as a function of the interaction between the individual and the scene. The voice referred to by the Examiner in Lyons is the voice of the user, not a generator controlled by a processing system. Although Lyons also discloses the generation of sound effects, Lyons does not disclose that the sound effects are a function of interaction between the individual and the scene, as required by this claim, nor is such a feature inherent. Again, "to establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations." M.P.E.P. 2142. This requirement is therefore not met in connection with claim 22. Claim 23 is dependent upon claim 22 and thus is also patentable for this reason.

Claim 37 is similar to claim 14 which is dependent upon claim 1 and is patentable in view of the applied references for the same reasons as claims 1 and 14.

Claims 5-10, 18, and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima in view of Ritchey, Lyons and Sauter as applied to claims 1-4 above, and further in view of Santodomingo et al. (7,038,694) ("Santodomingo"). This rejection is respectfully traversed and reconsideration is requested.

Claims 5-9 are dependent upon claim 4, and claims 10, 18, and 19 are dependent upon claim 1. As explained above, claims 1 and 4 are patentable in view Ohshima, Ritchey, Lyons and Sauter, and Santodomingo does make up for any of their deficiencies.

Claims 6-10 also require specific combinations of real and virtual objects, such as an operable door, window, or shutters in front of a wall display. The fact that Ohshima generically taught integrating real and virtual objects is not an anticipatory teaching of every possible combination of real and virtual object. A generic teaching does not anticipate all of its species. It is hornbook patent law. Again, "to establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations." M.P.E.P. 2142. Again, that requirement is not met here.

Claims 18 and 19 also requires the structure, display and real object to cooperate to create the environment of a building having a plurality of rooms (claim 18) or an alleyway (claim 19). Again, neither were disclosed by Santodomingo. The fact that Santodomingo disclosed using tiles to correspond to a "subdivision of an area," or that it enables "versatile fashion over any type of surface, such as a fictitious world [or] simulated wall" is far from disclosing a structure, display and real object that cooperate to create the environment of a building having a plurality of rooms or an alleyway. Again, "to establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations." M.P.E.P. 2142. Again, that requirement is not met here.

Claims 21, 24, 26, and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima in view of Ritchey, Lyons and Sauter as applied to claim 1, and further in view of Latypov et al. (6,563,489) ("Latypov"). This rejection is respectfully traversed and reconsideration is requested.

Claims 21, 24, 26, and 28 are dependent upon claim 1. As explained above, claim 1 is patentable in view Ohshima, Ritchey, Lyons and Sauter, and Latypov does make up for any of their deficiencies.

Claim 21 also requires the processing system of claim 1 that delivers images to also control a computer-controlled sensory generator. Nowhere does the information pointed to by the

Examiner disclose that the air conditioner in Latypov et al. is controlled by a computer or by the same processing system that delivers the images. Again, “to establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations.” M.P.E.P. 2142. Again, that requirement is not met here.

Claims 24, 26, and 28 are dependent upon claim 21 and thus are also not rendered unpatentable by Ritchey, Ohshima et al., Lyons, and Latypov et al. for the same reasons stated above in connection with claim 21.

Claims 21, 24, and 25 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima in view of Ritchey, Lyons, and Sauer as applied to claim 1, and further in view of Tanide et al. (6,201,516) (“Tanide”). This rejection is respectfully traversed and reconsideration is requested.

Claims 21, 24, and 25 are dependent upon claim 1. As explained above, claim 1 is patentable in view Ohshima, Ritchey, Lyons, and Sauter, and Tanide does make up for any of their deficiencies.

Claims 21 and 27 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ohshima in view of Ritchey, Lyons, and Sauter, as applied to claim 1, and further in view Dowling et al. (2003/0057884) (“Dowling”). This rejection is respectfully traversed and reconsideration is requested.

Claims 21 and 27 are dependent upon claim 1. As explained above, claim 1 is patentable in view Ohshima, Ritchey, Lyons and Sauter, and Dowling does make up for any of their deficiencies.

Claim 32 was rejected under 35 U.S.C. 103(a) as being unpatentable over Ritchey in view of Lyons. This rejection is respectfully traversed and reconsideration is requested.

Claim 32 is directed to, *inter alia*, a set of modular walls that releasably connect to and disconnect from one another to facilitate the assembly, disassembly, shipment and re-assembly of [an] interactive environment in various different configurations. Applicant respectfully disagrees that these features are disclosed in Ritchey. To the contrary, the framework and

supports in Ritchey are stated to be held together by "convention fasteners." Col. 28, lines 26-29. Also, there is no suggestion in Ritchey that its components may be disassembled and reassembled in "various different configurations," all as required by claim 32. Again, "to establish a prima facie case of obviousness, . . . the . . . references when combined . . . must teach or suggest all the claim limitations." M.P.E.P. 2142. Again, that requirement is not met here.

CONCLUSION

For the foregoing reasons, Applicant respectfully submits that this application is in condition for allowance.

Applicant also requests an interview with the Examiner to discuss this response prior to taking action upon it. A formal Request for Interview is being filed concurrently.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 501946 and please credit any excess fees to such deposit account.

Respectfully submitted,
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